

UNIVERSITY OF ALBERTA LIBRARY



0 0003 8197 711

ANNUAL REPORT
OF THE

Q26-1861 ✓
UNIVERSITY OF ALBERTA

NOV 2 1961

DOCUMENTS
LIBRARY

EASTERN ROCKIES FOREST
CONSERVATION BOARD

FOR THE
FISCAL YEAR

1960 - 61

GENERAL SCIENCES

ONE WEEK LOAN

SD
414
C2E116
1960/61

CALGARY, ALBERTA

MARCH 31, 1961

Ex LIBRIS
UNIVERSITATIS
ALBERTAENSIS



ANNUAL REPORT

of the

EASTERN ROCKIES FOREST CONSERVATION BOARD

for the

FISCAL YEAR

1960-61

Calgary, Alberta

March 31, 1961

ONTARIO AIRPORT AUTHORITY

1971

ANNUAL REPORT

1971

THE BOARD OF DIRECTORS

1971

1971

LIBRARY
UNIVERSITY OF ALBERTA

EASTERN ROCKIES FOREST CONSERVATION BOARD

Calgary, Alberta,
Sept. 29th, 1961.

The Honourable Norman Willmore,
Minister of Lands and Forests
Edmonton, Alberta.

Sir:

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period April 1st, 1960 - March 31, 1961, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am,

Your obedient servant,

J. R. H. Hall,
Chairman.

2299456

EASTERN ROCKIES FOREST CONSERVATION BOARD

Calgary, Alberta,
Sept. 29th, 1961.

The Honourable Hugh John Flemming,
Minister of Forestry,
Ottawa, Ontario.

Sir:

I have the honour to submit herewith the
Annual Report of the Eastern Rockies Forest Conservation
Board for the fiscal period April 1st, 1960 - March 31, 1961,
pursuant to the provisions of the Eastern Rocky Mountain
Forest Conservation Act of 1947. I am,

Your obedient servant,

J. R. H. Hall,
Chairman.

EASTERN ROCKIES FOREST CONSERVATION BOARD

Calgary, Alberta,
Sept. 29th, 1961.

The Honourable Hugh John Flemming,
Minister of Forestry,
Ottawa, Ontario.

Sir:

I have the honour to submit herewith the
Annual Report of the Eastern Rockies Forest Conservation
Board for the fiscal period April 1st, 1960 - March 31, 1961,
pursuant to the provisions of the Eastern Rocky Mountains
Forest Conservation Act of 1947. I am,

Your obedient servant,

J. R. H. Hall,
Chairman.

TABLE OF CONTENTS

	Page
Principal Officers	1
Introduction and Legislation	2
Meetings of the Board	2
Legislation	2
Board Membership	2
Administration	2
Personnel	3
Forest Management	5
Forest Inventory	5
Reforestation	5
Timber Operating Plans	6
Forestry Research	6
Watershed Management	8
Protection	8
Watershed Research	9
Range Management	13
Forest Protection	15
Forest Fire Protection	15
Biological Protection	16
Utilization of Resources	18
Forest Production	18
Grazing	20
Natural Gas and Mineral Development	21
Coal Development	21

Recreation	22
General Travel	22
New Construction	27
Bridges	27
Roads	28
Airstrips	28
Buildings	28
Power Lines	29
Maintenance	30
Roads	30
Buildings	30
Financial	31
Accounting	31
Banking	31
Workmen's Compensation	31
Expenditure	32
Revenue	32
Estimates	34
Appendices	
"A" Distribution of Alberta Forest Service Personnel	35
"B" Report on Forest Insect and Disease Conditions	36
"C" Report of the Provincial Auditor	42
Statement "A" Balance Sheet	43
Statement "B" Maintenance Expenditure	44
Statement "C" Proprietary Equity	45

EASTERN ROCKIES FOREST CONSERVATION BOARD

Board Members

Chairman and Provincial Member	J. R. H. Hall
Provincial Member	A. T. Baker, B.A.
Federal Member	G. Tunstell, B.Sc.F.

* * * * *

Principal Officers

Chief Forester	W. R. Hanson
Secretary	J. M. Marshall

* * * * *

INTRODUCTION AND LEGISLATION

MEETINGS OF THE BOARD The Board met five times in Calgary during the year under review. Minutes of the meetings were recorded and copies submitted to the Minister of Northern Affairs and National Resources of Canada (subsequently the Federal Department of Forestry) and the Minister of the Department of Lands and Forests of the Province of Alberta.

LEGISLATION No amendments were enacted affecting the existing Agreement between the Government of Canada and the Government of the Province of Alberta during the year under review.

BOARD MEMBERSHIP There were no changes in the membership of the Board during the year.

ADMINISTRATION An event of some significance in the Administration of the Conservation Area took place during the past year.

During the early years of the Agreement with the Government of Canada, the Province delegated some of its administrative duties to the Board. On April 15, 1959, the Province again assumed the administration of the Conservation Area under the direction of the Board, and retained its Calgary office for administrative purposes. By a change, effective April 1st, 1960, the Province reduced its staff in the Calgary office to a small group in the Construction and Maintenance section, who are directly responsible to the Director of Forestry.

Under the new arrangement the Board's functions as set out in the agreement may be defined as follows:

1. To set policy to be followed by the Alberta Forest

INTRODUCTION AND LEGISLATION

MEETINGS OF THE BOARD

The Board met five times in Calgary during the year under review. Minutes of the meetings were recorded and

copies submitted to the Minister of Northern Affairs and National Resources of Canada (subsequently the Federal Department of Forestry) and the Minister of the Department of Lands and Forests of the Province of Alberta.

LEGISLATION

No amendments were enacted affecting the existing Agreement between

the Government of Canada and the Government of the Province of Alberta during the year under review.

BOARD MEMBERSHIP

There were no changes in the membership of the Board during the year.

ADMINISTRATION

An event of some significance in the Administration of the Conservation

Area took place during the past year.

During the early years of the Agreement with the Government of Canada, the Province delegated some of its administrative duties to the Board. On April 15, 1959, the Province again assumed the administration of the Conservation Area under the direction of the Board, and retained its Calgary office for administrative purposes. By a change, effective April 1st, 1960, the Province reduced its staff in the Calgary office to a small group in the Construction and Maintenance section, who are directly responsible to the Director of Forestry.

Under the new arrangement the Board's functions as set out in the agreement may be defined as follows:

1. To set policy to be followed by the Alberta Forest

Service in administering and managing the Conservation Area (Rocky Mountains Forest Reserve of the Province of Alberta).

2. To plan a program of management for the use of the resources in the area.
3. To inspect the operations on the Conservation Area to make sure that the Board's plans and policies are being carried out.
4. To arrange for, and assist in carrying out, a watershed research program.

The Board's program each year is worked out in co-operation with the Forest Service and is then submitted to the Director of Forestry for implementation.

In order to carry out the functions of the Board, the following personnel establishment was approved on a continuing basis subject to some flexibility to meet changing conditions:

Chief Forester
Secretary - Office Administration
Two Assistants to the Chief Forester
Draftsman
Clerk-Stenographer

Provision was made to complement the foregoing establishment by engaging the services of such consultants as may be required on a fee basis, students to assist with field studies during the summer, and such additional stenographic staff as may be required during peak work periods.

ADMINISTRATIVE PERSONNEL

The permanent staff of the Department of Lands and Forests assigned to administer the Rocky Mountains Forest Reserve totalled 76 persons plus 15 seasonal lookout-men.

A summary showing the distribution of the foregoing staff is appended hereto. (Appendix "A")

In addition to the foregoing, seasonal employees comprising fire suppression crews, student assistants and road crew averaged 34 persons, substantially the same as during the previous year.

The administrative and field staff are employees of the Alberta Forest Service and are directly responsible to them.

Base Mapping	12,485				
Photo Interpretation	11,700				
Transferring	*	*	*	*	700
Correcting Maps					
and Photos	6,315	8,260			3,500
Numbering and Coding	6,555	7,975			3,724
Site and Maturity					
Classification	7,509	8,783			2,915
Planimetry	6,506	7,492			4,208
Final Drafting	7,802	9,802			1,896

An accurate measure of the total area photographed will not be available until planimetry has been completed. It has been estimated at 11,700 square miles, or approximately 2,700 square miles more than the Forest Reserve.

Preliminary forest-cover maps have been completed and have been in extensive use by field personnel during the past year.

All field work was completed during the summer and compilation is progressing satisfactorily.

Due to the depressed lumber market a moratorium was declared on the issuance of licenses in timber licenses. However, to offset the effects of the moratorium, plans were initiated to expand

FOREST MANAGEMENT

FOREST INVENTORY PROGRESS

Rocky Mountains Forest Reserve and adjacent forest area

	Area completed during 1960/61 <u>sq. miles</u>	Total area com- pleted to March 31, 1961 <u>sq. miles</u>	Area to be completed <u>sq. miles</u>
Photography	1,000	11,700	completed
Base Mapping	-	12,485	"
Photo Interpretation	2,143	11,700	"
Transferring	2,143	11,700	"
Correcting Maps and Photos	6,315	8,200	3,500
Numbering and Coding	6,555	7,976	3,724
Site and Maturity Classification	7,509	8,785	2,915
Planimetering	6,506	7,492	4,208
Final Drafting	9,802	9,802	1,898

An accurate measure of the total area photographed will not be available until planimetering has been completed. It has been estimated at 11,700 square miles, or approximately 2,700 square miles more than the Forest Reserve.

Preliminary forest-cover maps have been completed and have been in extensive use by field personnel during the past year.

All field work was completed during the summer and compilation is progressing satisfactorily.

REFORESTATION

Due to the depressed lumber market a moratorium was declared on the reforestation clauses in timber licenses. However, to offset the effects of the moratorium, plans were initiated to expand

reforestation programs in the Rocky Mountains Forest Reserve as well as other forested parts of the Province using appropriations voted for the purpose under the Department of Lands and Forests annual estimates. A start was made during the year by completing the following work:

- I. Some 22,000 seedlings were set out during the spring and fall planting seasons.
- II. A total of 350 acres of cut-over and burned-over land were scarified of which 100 acres were hand seeded.
- III. White spruce, Englemann spruce, and Douglas fir cones were collected and 137 pounds of seed were extracted and placed in cold storage.

TIMBER OPERATING PLANS

The program of requesting annual operating plans from timber operators was continued. Ten operators of the larger timber berths satisfactorily prepared the required plans. Difficulty has been encountered in obtaining these plans from some of the larger operators but each year the quality of plans has improved and the number received has increased. Some of the operators have been employing a forester on a consulting basis in order to have the plans prepared satisfactorily and to lay out their operations to the Department's specifications.

Periodic inspections of operations are made by forest officers to ensure that conditions of sale and annual operating plans are followed. These inspections are required each month.

FORESTRY RESEARCH

The research work noted below was conducted by the Forest Research Division, Department of Northern Affairs and National Resources (now the Department of Forestry).

During the year, research in silviculture, forest ecology and site classification was continued in the Conservation Area. New work was initiated on the problem of watershed management.

An eight-year study in the Kananaskis Valley to assess continuous planting of white spruce throughout the frost-free period was completed. Survival and height growth was best from spring planting but results show it is feasible to plant any time during the frost-free period, at least during years of normal precipitation.

Small trials, first initiated in 1952, of scarification and broadcast burning for regeneration of spruce and fir in the Crowsnest Forest show an adequate catch of seedlings only when treatment coincided with a good seed crop. The usual light seed crop characteristic of spruce in this region proved entirely inadequate.

Studies of inter-relations between spruce and fir regeneration and their micro-environments on cut-over lands in the Crowsnest Forest were continued. Data indicate that surface drought and high temperatures greatly limit germination and establishment of tree seedlings. Reports will be published on several phases of this work in 1961-62.

Field studies to describe and classify the spruce forest in the eastern slopes of the Rocky Mountains were completed. Ten types are recognized based on factors of ground vegetation, soils, topography and local climate. Lodgepole pine habitat types will be examined in 1961 and this will complete the description and classification for the sub-alpine forest.

The Board is greatly appreciative of this and other scientific research carried out by the Forest Research Branch, Federal Department of Forestry.

WATERSHED MANAGEMENT

Watershed management involves three phases: (1) protection and maintenance, (2) restoration where damage has occurred and (3) improvement over pristine conditions. The first mentioned should and does supersede the other two in management of the Conservation Area.

PROTECTION

Protection against fire, the first line of defence in watershed protection, and biological protection are covered elsewhere in the report.

In the sale of timber berths the following regulations to ensure watershed protection were included in the conditions of sale:

- (1) No green timber shall be cut within 150 feet of the high watermark of any watercourse unless marked or otherwise designated for removal in writing by a forest officer.
- (2) No green timber above an elevation of 6,000 feet (6,500 feet in some cases) shall be cut unless approved by the Board.
- (3) No debris from logging or milling operations shall be allowed to enter a stream or watercourse.
- (4) All roads shall be located and constructed so as to ensure a minimum of erosion damage and sediment deposit in streams and channels. No road shall restrict the natural flow of a stream. Bridges and culverts shall have sufficient clearance to allow the peak flow to carry a normal burden of debris.
- (5) On abandonment of skid roads and trails the licensee shall divert the drainage to safe channels and shall take such other action to prevent erosion

as may be directed by the forest officer.

The outline of operational plans required of timber operators was revised during the year under review and the watershed protection section was brought up to date in line with the above conditions of sale.

Efforts to protect range watershed from deterioration in condition and to restore damage which has occurred on small local areas are being continued. Inspection and supervision by Alberta Forest Service personnel and checking by Board staff continued. The re-survey and re-writing of range-management plans, with special consideration for watershed condition, continued.

Inspection of mining, drilling, seismic exploration and pipe-line construction was carried out by the Alberta Forest Service with occasional checks by Board staff. In general, satisfactory watershed conditions were maintained. A long pipe line was begun in the Crowsnest Forest with danger of erosion and damage to watershed values. A request was made by the Board for a change in the lease and easement agreement so as to safeguard watershed values. Careful inspection and supervision were also requested.

WATERSHED RESEARCH

During the year steps were taken to get the research program mentioned in the 1959-60 report under way.

A second meeting of the Steering Committee was held in Ottawa on May 18 and the report of the Technical Advisory Committee, which outlined a tentative program of research was approved in principle. It was there agreed that the watershed research program was to be conducted through the efforts of the co-operating agencies mentioned hereinafter with the work directed by a steering committee in Ottawa comprised of representatives of the various agencies and under the chairmanship of the Director of Forestry, Department of Northern Affairs and National Resources. The committee was to be assisted by a technical advisory committee comprised of on-the-job representatives of the co-operating agencies under the chairmanship of the Chief Forester of the Eastern Rockies Forest Conservation Board.

Two meetings were held by the Technical Advisory Committee on August 6, 1960, and February 6, 1961, to outline a program of research and to co-ordinate the activities of the co-operating agencies.

Two research areas were tentatively selected, one comprising the basin of Marmot Creek in the Kananaskis valley near the Kananaskis Forest Experiment Station and the other comprising the basin of Dry Coulee in the Porcupine Hills. Gathering of basic data on sub-alpine watersheds, fundamental research, and possibly applied research to determine the best methods of logging a spruce-fir forest for watershed values were to be carried out at Marmot Creek. Gathering basic watershed data on forest range land and some fundamental and applied research on the effect of manipulation of vegetation upon watershed values were to be undertaken at Dry Coulee.

A tour of some of the watershed research areas of the western United States was undertaken by members of the Technical Advisory Committee. Research stations and projects were visited at Fort Collins, Fraser, and Black Mesa, Colorado; the Great Basin Station (Ephraim); Ogden, and the Davis County Watershed in Utah; and near McCall in Idaho.

The following preliminary programs were outlined for the two research areas:

Marmot Creek:

1. Forest Inventory before June 1961 - Alberta Forest Service and Forestry Research Division.
2. Ground Water Survey - Alberta Research Council.
3. Topographic Survey and Maps - Alberta Water Resources Branch.
4. Soils Survey - Co-operative Soils Survey.

5. If approved as a research area - the establishment of a meteorological network by the Meteorological Service and the building of stream gauging stations by the Federal Water Resources Branch.

Dry Coulee

1. Plant cover inventory - Eastern Rockies Forest Conservation Board, 1961.
2. Ground Water Survey - Alberta Research Council, 1962.
3. Topographic Survey and Maps - Alberta Water Resources Branch, 1962.
4. Soils Survey, 1962.
5. Instrumentation and Gauging Stations - 1962 or 1963.

Co-operating agencies assigned to carry out phases of the watershed research program were:

The Forest Research Division, Department of Forestry
Agricultural Research Division, Canada Department
of Agriculture

Meteorological Service, Department of Transport
Water Resources Branch, Department of Northern
Affairs and National Resources

Prairie Farm Rehabilitation, Canada Department
of Agriculture

Wildlife Service, Department of Northern Affairs
and National Resources

Alberta Research Council

Water Resources Branch, Alberta Department of
Agriculture

Alberta Forest Service, Department of Lands and
Forests

Eastern Rockies Forest Conservation Board

A reconnaissance and problem analysis for watershed research in the Conservation Area was begun in 1960 by personnel of the Calgary Forest Research Branch, Department of Forestry. The objectives of this work, which were to determine the existence and relative importance of watershed problems, will be completed in 1962 when a research program will be submitted delineating specific work to be carried out.

Some additional jobs were undertaken including a review of literature by each participating agency.

* * * *

RANGE MANAGEMENT

The management plans for many range allotments are out of date and in need of revision. Twelve allotments were resurveyed and mapped during the year, and new plans are now being prepared for them. Nine of these allotments were located in the Crowsnest Forest, two in the Clearwater Forest and one in the Bow River Forest. At the present rate of progress each allotment will be re-examined every five to seven years.

Sound range-management practices are gradually being accepted and put into practice by stock associations and individual permittees.

Range condition remained generally satisfactory in spite of unusual drought conditions in the southern section of the Reserve. The degree of utilization was somewhat heavier than normally desired because of the significant decrease in forage yield. Should the drought be prolonged for a period of years, steps to reduce grazing pressure will be necessary.

The area of overutilized range decreased to 5,060 acres, which represents one third of one per cent of all range land being used at the present time. Most overgrazing was not severe and did not affect extensive areas.

Underutilized range land was estimated at 5,000 acres in established allotments. In addition, there is a considerable acreage of unallotted range in the Clearwater Forest that is a considerable distance from settlement.

Considerable water development was carried out by the Prairie Farm Rehabilitation Administration with the total of completed stock-watering projects now forty-five.

Only a few other improvements such

as driveways, drift fences and Texas gates were constructed during the year and many more are still required.

Detailed range-management planning and supervision of grazing use previously carried out by Board staff is now directly under the Management Division of the Alberta Forest Service. The forester who carried out work for the Board has been transferred to this work in the Alberta Forest Service and essentially the same procedures are being followed. Close liaison is being kept between the Board staff and the Forester in charge of grazing and policies and programs established by the Board are being carried out.

* * * *

Heavy rains occurred in most districts during the latter part of August dropping the fire hazard to low. Throughout the remainder of 8 - year the fire danger index remained low to moderate.

A total of 49 fires were recorded in the Conservation Area during the year.

The following tables show the fire statistics by forest area, area and acres.

Fires Recorded by Forest and Area Protected

	Number	Area Protected
Clearwater Forest	17	54.27 acres
How River Forest	12	55.11 "
Crowfoot Forest	11	1.2 "
	40	110.58 acres

FOREST PROTECTION

FOREST FIRE PROTECTION

Fire danger was high throughout the Bow River and Clearwater Forests during the last two weeks of April and the first week of May. However, a general snow occurred the second week of May which reduced the hazard to normal. The fire danger index remained low to medium in most areas throughout June although some districts recorded a high danger for short periods.

Fire danger throughout the Bow River and Clearwater Forests was generally high during July. Extreme fire danger existed in the Crowsnest Forest during this period and it was necessary to close that forest to public travel from July 18 to August 2. Similar conditions existed in the Kananaskis and Highwood districts in the Bow River Forest; however, a closure was not considered necessary in these areas.

Heavy rains occurred in most districts during the latter part of August dropping the fire hazard to low. Throughout the remainder of the year the fire danger index remained low to moderate.

A total of 40 fires were recorded in the Conservation Area during the year.

The following tables show the fire statistics by forest areas, sizes and causes:

Fires Recorded by Forest and Area Burned

	<u>Number</u>	<u>Area Burned</u>
Clearwater Forest	17	14.25 acres
Bow River Forest	12	55.13 "
Crowsnest Forest	11	3.0 "
	40	72.38 acres

Fires by Causes

<u>Causes</u>	<u>Total Fires</u>	<u>Per cent to Total</u>
Campers	15	37.5
Smokers	6	15.0
Lightning	11	27.5
Industrial	6	15.0
Incendiary	<u>2</u>	<u>5.0</u>
	<u>40</u>	<u>100.0</u>

Fires by Size Classification

Class "A" (less than 1/4 acre)	29
Class "B" (1/4 acre to 10 acres)	10
Class "C" (10 acres to 100 acres)	<u>1</u>
	<u>40</u>

In addition to the foregoing, the forest reserve staff and equipment were called upon to extinguish 32 fires which occurred adjacent to the Conservation Area which burned over a total of 55.22 acres.

BIOLOGICAL
PROTECTION

Surveys and research on forest insects and diseases were continued in the Conservation Area in 1960 as part of the Department of Forestry, Forest Entomology and Pathology Branch program for Alberta. No significant changes for the worse in the general disease and insect conditions of the area were noted during the year, although a late summer drought caused foliage and branch injury to most conifers and slightly increased damage from the spruce budworm, larch sawfly, spruce gall aphids, and poplar leaf miner was noted. Aspen defoliation was greatly reduced from previous years.

A composit report on forest insect and disease conditions in the Conservation Area prepared by the Federal Forest Entomology and Pathology Branch is appended hereto. (Appendix "B")

The Board again wishes to express its appreciation for the continuing interest of the Forest Entomology and Pathology Branch in this field in the Conservation Area.

* * * *

UTILIZATION OF RESOURCES

FOREST PRODUCTION

Thirteen timber berths were sold during the fiscal year 1960-61 with a total volume of 99,409,000 feet

board measure and 1,300,358 lineal feet distributed by species as follows:

White spruce	81,090,000 f. b. m.
Pine	12,318,000 f. b. m. - 1,300,358 lin. ft.
Douglas fir	4,721,000 f. b. m.
Balsam fir	1,280,000 f. b. m.

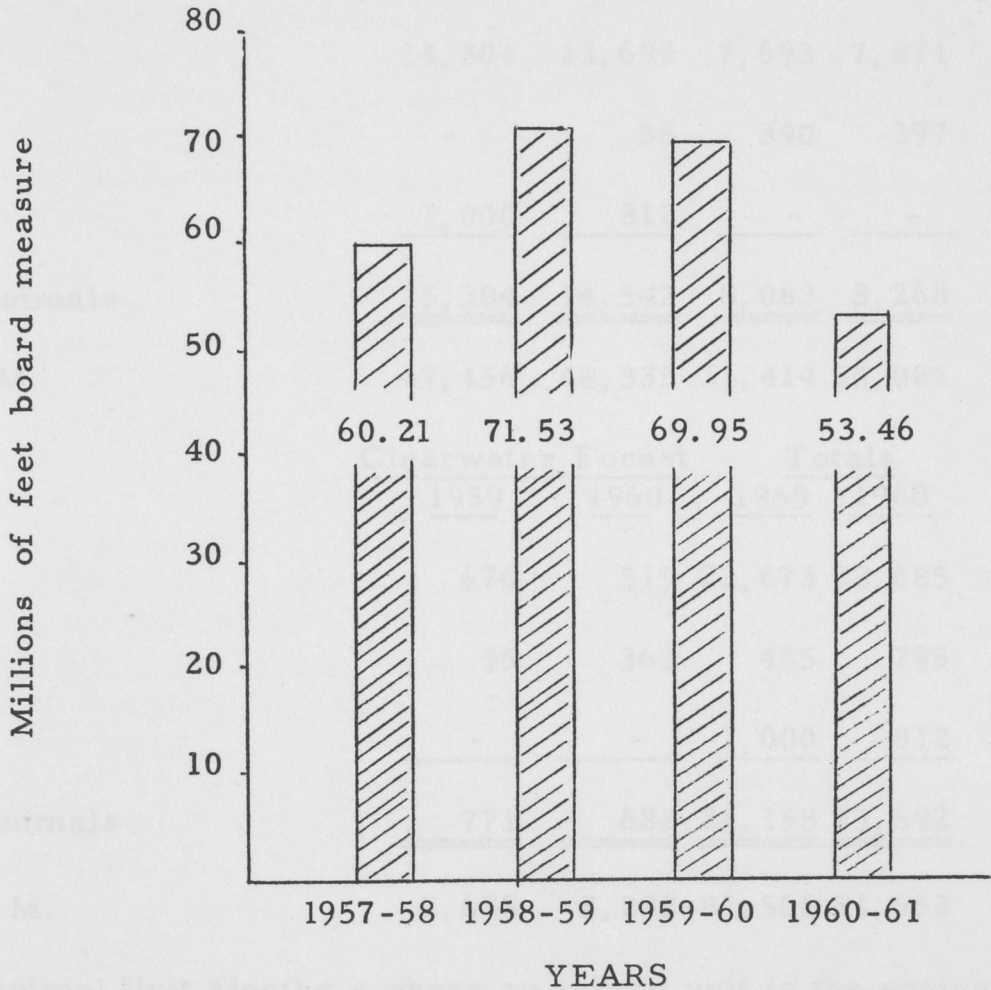
The depressed market for forest products resulted in lumber production being cut back by 20.79% compared to 1959-60 while cutting of round timbers showed a very substantial decrease of 58.82%. A brisk demand for fire-killed pulpwood resulted in a good cut.

There were 96 timber berths and 18 special timber permits active during the year, and 462 miscellaneous timber permits were issued during the period.

Production of Lumber and Related Products

	<u>1959-60</u>	<u>1960-61</u>
Lumber and ties (million f. b. m.)	58,92	46.67
Round timber, green and dry (million lineal feet)	5.61	2.31
Pulpwood (cords)	-	65,207
Plywood, poplar (cords)	8,305	-
Christmas trees	15,701	15,769

ANNUAL PRODUCTION OF LUMBER,
TIES, AND ROUND TIMBER FROM
ROCKY MOUNTAINS FOREST RESERVE



CONVERSION FACTORS

One lineal foot round timber = 1.375 f. b. m.

One cord = 400 f. b. m.

GRAZING

Grazing by domestic livestock remained at about the same level as in previous years, as shown by the following table. The number of animals grazed on leases within the reserve are not included.

	<u>Crowsnest Forest</u>		<u>Bow River Forest</u>	
	<u>1959</u>	<u>1960</u>	<u>1959</u>	<u>1960</u>
Cattle	14,304	13,695	7,693	7,871
Horses	-	35	390	397
Sheep	<u>1,000</u>	<u>812</u>	<u>-</u>	<u>-</u>
Total Animals	<u>15,304</u>	<u>14,542</u>	<u>8,083</u>	<u>8,268</u>
* A. U. M.	47,456	48,335	31,414	30,085

	<u>Clearwater Forest</u>		<u>Totals</u>	
	<u>1959</u>	<u>1960</u>	<u>1959</u>	<u>1960</u>
Cattle	676	519	22,673	22,085
Horses	95	363	485	795
Sheep	<u>-</u>	<u>-</u>	<u>1,000</u>	<u>812</u>
Total Animals	<u>771</u>	<u>882</u>	<u>24,158</u>	<u>23,692</u>
* A. U. M.	2,638	3,232	81,508	81,652

* Animal Unit Months - where an animal unit is the equivalent of a 1000-pound cow and sucking calf at foot.

The above mentioned cattle belong to 298 permittees living in the foothills near the Forest Reserve.

NATURAL GAS AND MINERAL DEVELOPMENT

Fourteen companies were actively engaged in an accelerated program of geophysical exploration.

All geophysical programs are submitted to the Department s of Lands and Forests for review and approval before work is commenced. Wherever possible every effort is made to prevent unnecessary disturbance and destruction of timber by restricting the operation to existing lines. At least 75% of the work done on the Reserve during 1960-61 was carried out on existing lines. Operators are also required not to obstruct drainage or construct lines in such a way that erosion might occur. Erosion prevention measures such as cross ditching have been required on many lines.

During the year 13 gas wells and one oil well were completed. There were 11 dry holes drilled, drilling of one other well was suspended and ten others were still in progress at the end of the year.

Saratoga Gas Processing Company is constructing a pipe line to carry sour gas from wells in the Savanna Creek area to Coleman where a sulphur plant is to be located. The gas will be fed into Alberta Gas Trunk main line in the Crowsnest Pass. Survey of the Saratoga line was completed and clearing of the right-of-way commenced.

Right-of-way clearing was also carried out on the Alberta Gas Trunk pipe line right-of-way through the Crowsnest Pass.

Shell Oil did considerable work on a gathering system in the Castle River field, to collect and supply gas to the sulphur plant.

COAL DEVELOPMENT

Coal mining activities, which have an influence on watershed, are going on in the Conservation Area. Coleman Collieries Limited produced approximately 248,950 tons from their strip mine on Tent Mountain and the underground mine at Vicary Creek.

RECREATION

GENERAL TRAVEL

Public travel in the Conservation Area continued its upward trend during the fiscal year under review with a total of 81,462 vehicles carrying 247,411 passengers registered for various purposes. This is an increase of 14,640 vehicles and 40,043 passengers over the previous year.

The following summary indicates the steady increase in public use of the area since an annual record of travel was first compiled in 1956.

<u>Year</u>	<u>Forest Users</u>	<u>% Increase</u>
1956-57	138,006	-
1957-58	185,914	34.7
1958-59	189,654	2.0
1959-60	207,368	9.3
1960-61	247,411	19.3

Travel figures for the fiscal year 1960-61 by forests, as compared with the previous year are shown on the next page.

Registered Travellers by Forests

	<u>1959-60</u>	<u>1960-61</u>	<u>Increase</u>	<u>% Increase</u>
Crowsnest Forest	42,064	55,488	13,424	31.8
Bow River Forest	127,844	146,199	18,355	14.3
Clearwater Forest	<u>37,460</u>	<u>45,724</u>	<u>8,264</u>	<u>22.1</u>
	<u>207,368</u>	<u>247,411</u>	<u>40,043</u>	<u>19.3</u>

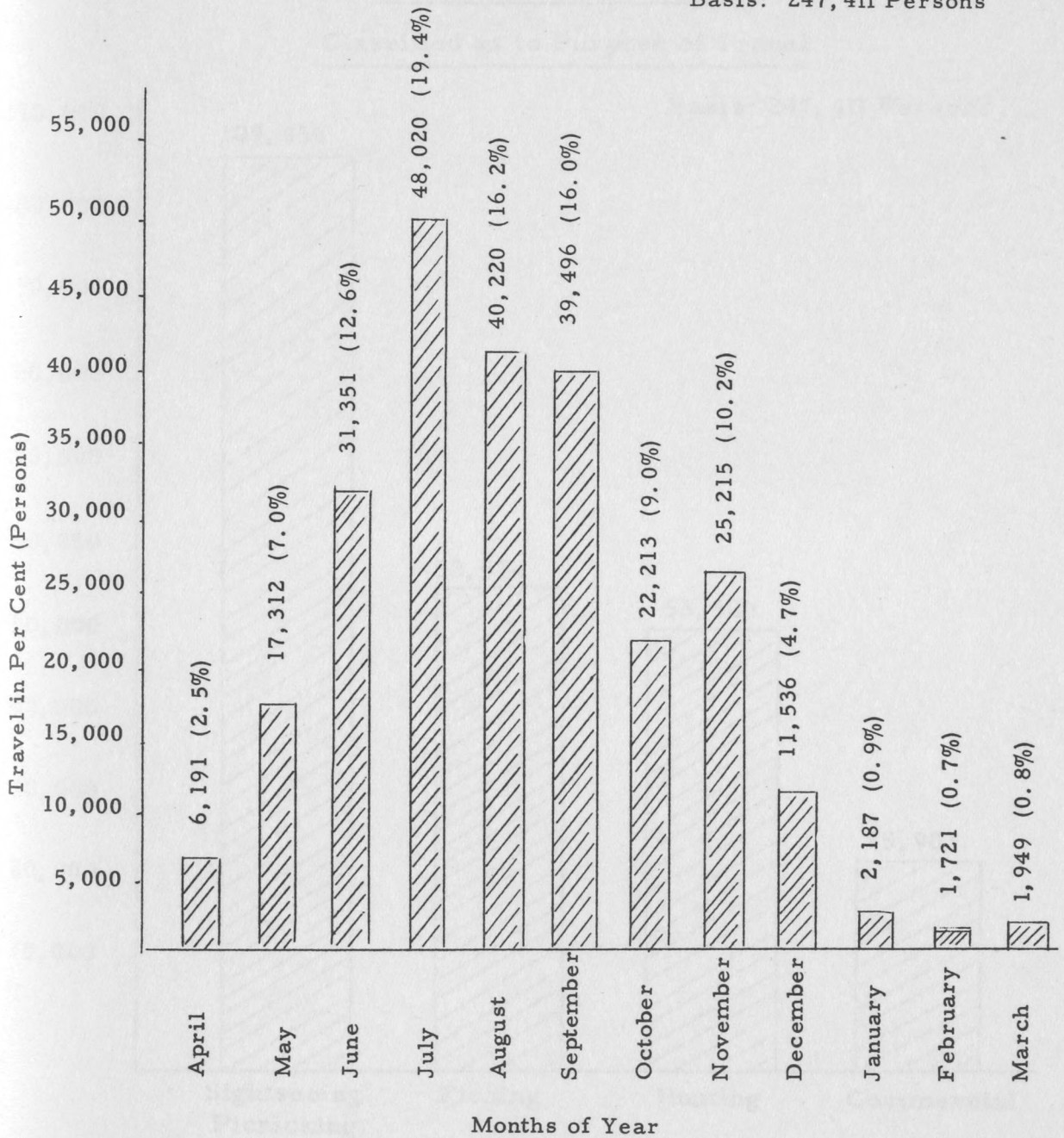
From the foregoing it will be noted that the Bow River Forest continued to attract the largest number of forest users, particularly in the Kananaskis, Ghost and Elbow districts. The Kananaskis area alone attracted some 35,700 travellers during the year with the Ghost and Elbow districts being host to slightly over 26,000 persons each.

During the past year the Alberta Forest Service improved existing campgrounds and enlarged 14 of them. Three new campgrounds were started in the Clearwater Forest and two camp shelters were completed under the winter work program. Two additional shelters were commenced in the Bow River Forest. Campground improvements included the construction of 130 tables, 40 outhouses and 65 fireplaces.

Frequency of travel in the Conservation Area by months remains at about the same level as in previous years as indicated by the following chart, with travel being heaviest during the months of June, July, August and September.

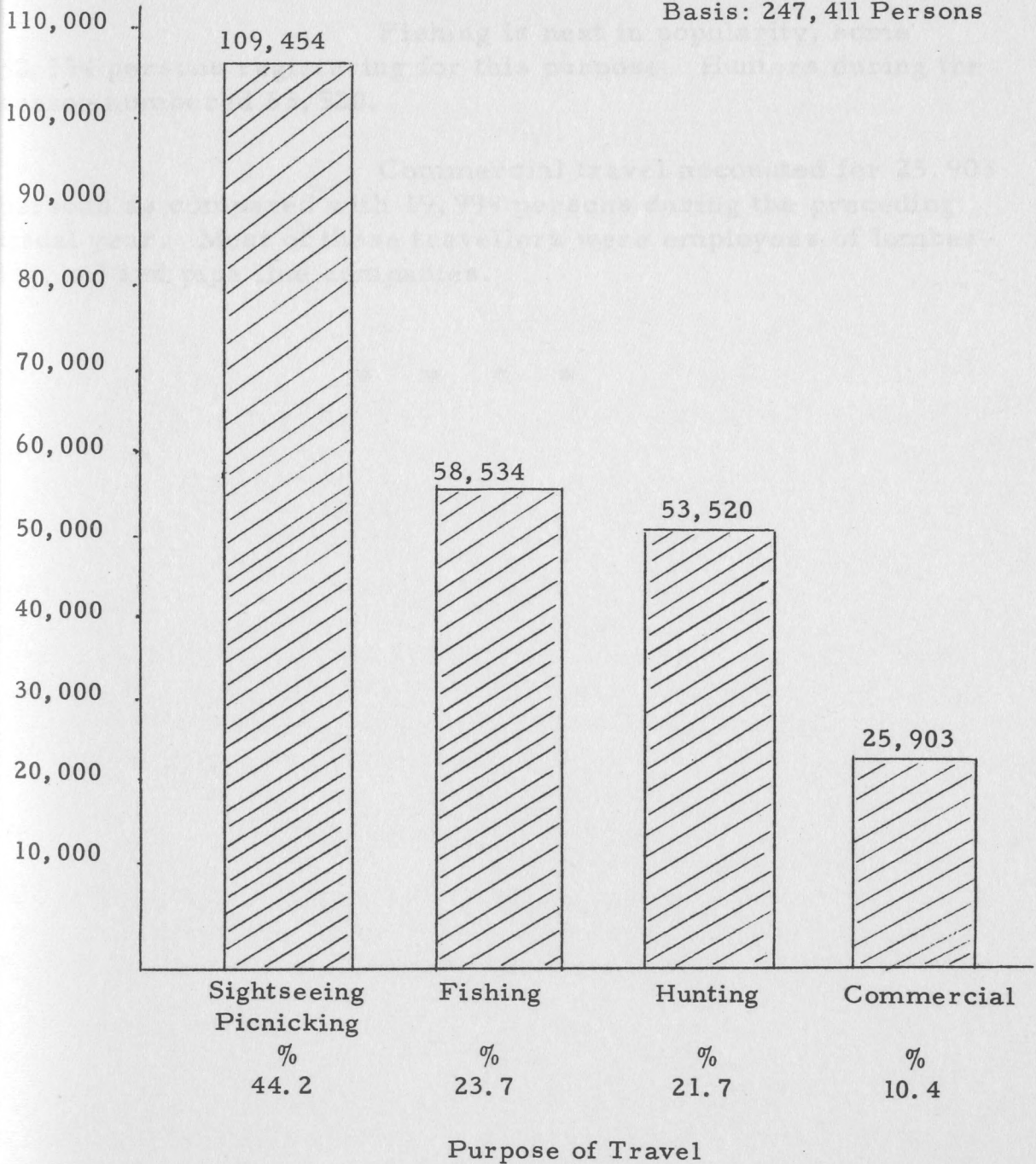
Frequency of Travel by Months

Basis: 247,411 Persons



Number of Forest Users
Classified as to Purpose of Travel

Basis: 247,411 Persons



As indicated on the foregoing chart, sightseers and picnickers again formed the largest single group of forest users, numbering 109,454 persons or 44.2 per cent of the total recorded travel.

Fishing is next in popularity; some 58,534 persons registering for this purpose. Hunters during the season numbered 53,520.

Commercial travel accounted for 25,903 persons as compared with 19,999 persons during the preceding fiscal year. Most of these travellers were employees of lumbering, oil and pipe line companies.

* * * *

NEW CONSTRUCTION

BRIDGES

Blackstone Bridge

A precast concrete bridge was constructed during the winter months across the Blackstone River on the new Nordegg-Brazeau Road in the Clearwater Forest. The bridge is 210 feet in length and the cement stringers rest on four rock-filled pile-driven piers. Built to H20-S16 loading standards the total cost of the structure was \$36,000.

Yara Creek Bridge

A precast concrete bridge, 40 feet in length, was constructed during the year under review across Yara Creek in the Red Deer district of the Bow River Forest. Placed on creosoted piling and built to H20-S16 standards the cost of the bridge was approximately \$6,539.

Upper Elbow Bridge

A 40-foot bridge constructed of treated native timber was built across the Upper Elbow River on the Bow Secondary Road during the month of December. The load limit established for this structure is 20 tons. Total cost of the project was \$2,083.

Johnson Creek Bridge

A 20-foot single-span native-timber bridge was completed on the Johnson Creek Road in the Crowsnest Forest during September 1960. The bridge was built to withstand H20-S16 loading.

Tay River Bridge

This bridge on the Swan Lake Road in the Clearwater Forest was completed in October 1960. It was constructed of treated native timber and has a centre pile-driven pier and two 20-foot spans. The bridge was constructed to withstand H20-S16 loading.

ROADS

Brazeau-Nordegg Road

This road is an important link in the Nordegg-Goodwin Road in western Alberta. When completed, the road will be 24 feet in width and will have a 125-foot right-of-way. Seventeen miles of rough grade were completed during the year. In addition 18 miles of new right-of-way were cleared during the winter months as part of the Federal-Provincial Forest Access Road Agreement. Seventy-eight thousand dollars was spent on construction work on this project during the year.

WINTER ROAD PROGRAM

Under the Federal-Provincial Road Agreement the sum of \$95,000 was spent during the winter of 1960-61 on right-of-way clearing and brush disposal on the following road projects in the Conservation Area:

- Elbow Road
- North Fork Truck Trail
- Porcupine Lookout Road
- Cline Lookout Road
- Blackstone Lookout Road
- Brazeau-Nordegg Road
- Red Deer Road
- James Section, Forestry Trunk Road

AIRSTRIPS

A new airstrip, 150 feet in width and 3,000 feet in length was constructed immediately south of the Clearwater Ranger Station.

BUILDINGS

Blackstone Lookout

Construction on this new lookout in the Clearwater Forest commenced during the winter. It was not completed during the fiscal year.

Cline Lookout

This new lookout in the Clearwater Forest was completed during the year under review. All material was flown to the site by helicopter.

Fuel Sheds

A small fuel shed was built at each of the Ghost and Red Deer Ranger Stations in the Bow River Forest.

POWER LINES

\$7,215.

Line power was extended six miles to the Prairie Creek Ranger Station at a cost of

* * * *

MAINTENANCE

ROADS

The forestry trunk road, together with access roads and truck trails, were maintained regularly by five large patrol graders operated by the forestry road maintenance crew. Approximately 600 miles of road in the Conservation Area were graded and repaired where necessary.

Sixty-one miles of the forestry trunk road in the Crowsnest Forest were re-shaped and re-gravelled during the year using approximately 225 cubic yards of 3/4 inch gravel to the mile.

Bridges on the trunk road were tightened and re-painted.

BUILDINGS

All buildings throughout the Forest Reserve received regular maintenance and 19 buildings were re-painted.

* * * *

Salaries	\$ 23,934.75
Traveling Expenses	715.43
Printing, Stationery &	
Office Supplies	181.01
Telegrams and Telephone	212.31
Postage	97.00
Miscellaneous Expenses	37.23
	\$ 25,170.53

A current account is maintained with the Royal Bank of Canada in Calgary, Alberta.

The Board's deposit with the Alberta Workmen's Compensation Board earned interest amounting to \$19.47 less administrative fees and reserve for contingencies and sundries.

FINANCIAL

ACCOUNTING

No change in accounting procedure was instituted during the year under review.

The Province continued in its capacity as purchasing and paying agent with respect to the maintenance and administration of the Conservation Area except for limited purchases made by the Board for office administration and the payment of salaries of personnel employed by the Board who are not civil servants. This group comprises the Secretary, Chief Forester, Draftsman, Technical Officer and one Clerk-Stenographer, all of whom are stationed at the Board's head office in Calgary and are directly responsible to the Board.

An accountable advance of \$5,000 is provided by the Province from which to defray the foregoing expenses. This account is reimbursed monthly by the Province on the basis of an audited statement of expenditure.

Disbursements by the Board totalled \$30,622.57 as detailed hereunder:

Salaries - Board Personnel	\$ 28,989.75
Travelling Expenses	745.03
Printing, Stationery & Office Supplies	481.61
Telegrams and Telephones	219.90
Postage	97.00
Miscellaneous Expenses	89.28
	<u>\$ 30,622.57</u>

BANKING

A current account is maintained with the Royal Bank of Canada in Calgary, Alberta, from which the Board disburses its administrative expenses.

WORKMEN'S COMPENSATION

The Board's deposit with the Alberta Workmen's Compensation Board earned interest amounting to \$199.49 less administrative expense and reserve for rehabilitation and enhanced disabilities

FINANCIAL

ACCOUNTING

No change in accounting procedure was instituted during the year under review. The Province continued in its capacity as purchasing and paying agent with respect to the maintenance and administration of the Conservation Area except for limited purchases made by the Board for office administration and the payment of salaries of personnel employed by the Board who are not civil servants. This group comprises the Secretary, Chief Forester, Districtman, Technical Officer and one Clerk-Stenographer, all of whom are stationed at the Board's head office in Calgary and are directly responsible to the Board.

An accountable advance of \$5,000 is provided by the Province from which to defray the foregoing expenses. This account is reimbursed monthly by the Province on the basis of an audited statement of expenditure.

Disbursements by the Board totalled:

\$30,625.57 as detailed hereunder:

Salaries - Board Personnel	\$ 28,989.75
Travelling Expenses	745.03
Printing, Stationery &	
Office Supplies	481.61
Telegrams and Telephone	219.90
Postage	97.00
Miscellaneous Expenses	89.28
	<u>\$ 30,625.57</u>

BANKING

A current account is maintained with the Royal Bank of Canada in Calgary, Alberta, from which the Board disburse its administrative expenses.

WORKMEN'S
COMPENSATION

The Board's deposit with the Alberta Workmen's Compensation Board earned interest amounting to \$199.49 less administrative expense and reserve for rehabilitation and enhanced disabilities

of \$53.00 leaving a net credit to Proprietary Equity Account of \$146.49.

No claims for injuries were incurred by Board personnel (non-civil servants) during the fiscal year under review.

EXPENDITURE Expenditure for the maintenance and admin-
MAINTENANCE AND istration of the Conservation Area, including
ADMINISTRATION expenses of the Board, provided by the
 Province of Alberta in accordance with
Section 2(a) (11) of the Memorandum of Agreement between the
Government of Canada and the Government of the Province of
Alberta, totalled \$865,920.77 for the fiscal year ended March
31, 1961.

The accompanying certified Statement of Assets and Liabilities, together with subsidiary schedules, reflects in detail the financial operations of the Board and the Province with respect to the maintenance and administration of the Conservation Area. (Appendix "C")

REVENUE Revenue from surface rights derived by
 the Alberta Department of Lands and
Forests from the area amounted to \$447,373.94 for the year under
review as compared with \$554,373.61 for the previous year, a
decrease of \$106,999.67, principally due to the depressed timber
market.

Details of revenues are as follows:

	<u>1959-60</u>	<u>1960-61</u>
Grazing Permits, Taxes and Revenue Permits	\$ 46,609.41	\$ 65,957.40
Hay Permits, Fees, Dues, etc.	16.50	17.50
Miscellaneous Leases	979.28	1,232.47
Miscellaneous Revenue	6,504.51	1,267.17
Timber Permits	12,620.18	10,168.65
Special Timber Permits	9,492.07	9,313.69
Timber Fees, Rent, etc.	17,948.54	19,440.50
Timber Dues	449,591.31	330,833.66
Administrative Sundry Revenue	9,253.35	8,330.50
Previous Year Refunds (Income)	5.70	-
Timber Miscellaneous Revenue	516.48	-
Right-of-Entry	836.28	812.40
	<u>\$ 554,373.61</u>	<u>\$ 447,373.94</u>

In addition to general revenues, collections by the Province from road tolls amounted to \$9,027.17 during the year under review. The status of this account as at March 31, 1961, is outlined hereunder:

Balance on hand as at March 31, 1960	\$ 10,240.56
Collections by the Province for the fiscal year 1960-61	9,027.17
Total credits to fund	<u>19,267.73</u>
Less disbursements during the year	<u>11,630.25</u>
Balance on hand March 31, 1961	\$ <u>7,637.48</u>

Revenue obtained from this source, which was originally established at the request of the Board, is carried in a Special Trust Fund set up by the Provincial Treasurer as authorized by the Forest Reserves Act and may be used as required for the construction of new roads or for the maintenance of existing roads within the Forest Reserve.

ESTIMATES
FISCAL YEAR
1961-62

Estimates for the maintenance and administration of the Conservation Area for the fiscal year 1961-62 were approved by the Legislature of the Province of Alberta under appropriation No. 1817 totalling \$974,560, as compared with \$849,910 for the fiscal year 1960-61, an increase of \$124,650.

In addition to the foregoing a sum of \$46,800 was provided for the administration of the Eastern Rockies Forest Conservation Board and \$8,000 for a watershed research program, a total of \$54,800 under appropriation No. 1819.

* * * *

DISTRIBUTION OF ALBERTA FOREST SERVICE PERSONNEL

Appendix "A"

Fiscal Year 1960 - 61

PERMANENT STAFF	Rocky Mtns. Forest Reserve Calgary Office	Crowsnest Forest	Bow River Forest	Clearwater Forest	Totals
Forest Superintendents	-	1	1	1	3
Assistant Superintendents	-	1	1	1	3
Foresters	1 *	1	1	1	4
Headquarters' Rangers	-	1	1	1	3
District Rangers	-	6	7	5	18
Assistant Rangers	-	4	9	6	19
Chief Clerk	1	-	-	-	1
Clerks - Stenographers	1	2	3	4	10
Maintenance Foreman - Buildings	1	-	-	-	1
" - Mechanical	1	-	-	-	1
" - Roads	1	-	-	-	1
Tractor-Grader Operator Mechanics	2	1	1	1	5
Garage Mechanic	1	-	-	-	1
Maintenance Man - Signs	-	1	-	-	1
Warehouseman	-	-	1	-	1
Truck Driver	1	-	-	-	1
Lookoutmen - Permanent	-	1	1	1	3
Lookoutmen - Seasonal	10	19	26	21	76
	-	4	7	4	15
	10	23	33	25	91

* Forester in charge of Grazing

- 36 -

DEPARTMENT OF FORESTRY

Forest Entomology and Pathology Branch

August 23, 1961

Report on Forest Insect and Disease Conditions

in the

Eastern Rockies Forest Conservation Area

1960-61

INSECTS

Spruce budworm Choristoneura fumiferana (Clem.)

An outbreak of this budworm was present throughout the logging berth of the Edwards Lumber Company, southwest of Nordegg. This infestation occurred on the south side of the Saskatchewan river adjoining the Banff National Park boundary and extended east approximately 5 miles. Heaviest defoliation appeared on the subalpine fir understory with light damage occurring to white spruce. This outbreak area appeared to be a continuation of the infestation that has persisted in the Banff National Park for a number of years.

Light damage to subalpine fir and white spruce regeneration was observed 13 miles up the Atlas Haul Road 5 miles east of Nordegg.

American aspen beetle, Gonioctena americana Schffr.

The american aspen beetle caused light damage to aspen in the Crowsnest and Bow River forest reserves.

Low populations were found generally along Coleman-Kananaskis Road. At the Dutch Creek Camp Ground, several trees 3 to 4 feet high were completely defoliated. At Beaver Mines and Burmis defoliation was light with some severe damage occurring one mile south of Beaver Mines. Aspen in the foothills near Millarville, Bragg Creek, and Turner Valley supported low populations with moderate damage being done to a small clump of trees at Priddis. From Longview to the Highwood Ranger Station all aspen examined supported low populations.

Poplar leaf miner, Phyllocnistis populiella Cham.

Characteristic mining of aspen leaves by this insect was noticeable in most of the forested areas visited during the field season. Although they did not cause serious damage, there was a noticeable increase in populations over those in 1959.

Larch sawfly, Pristiphora ericksonii (Htg.)

Populations of this sawfly on larch increased and were more widely distributed in 1960. The heaviest defoliation was again centered in the Rocky Mountain House - Sylvan Lake area south to the limits of larch near Sundre. West of this area to Nordegg, populations had increased considerably. Moderate defoliation was recorded for 12 miles west of Rocky Mountain House. From this point to the western limits of larch near Nordegg, the amount of defoliation became progressively lighter.

Eighteen miles south of the Clearwater Ranger Station, defoliation was severe. Over the remainder of the District, light defoliation was evident in all stands visited.

Adelges sp.

There was a noticeable increase in the number of spruce tips infested by this gall-making insect throughout the forested area. High populations were recorded from

Cochrane north to Rocky Mountain House along the East Slopes Road, and along the road from Cochrane to Caroline.

Poplar borer, Saperda calcarata Say.

At the Kananaskis Ranger Station a high population of poplar borer was found in three quarters of an acre of aspen, some trees with as many as 20 strikes. Seven miles south of the Kananaskis Ranger Station in a quarter acre stand 10 dead trees were found. These trees had been heavily attacked by poplar borers. A high population was reported from 2 miles west of Canmore but the area was less than one quarter acre in extent.

* * * *

DISEASES

Lodgepole pine stem canker Atropellis piniphila (Weir) Lohman
& Cash.

Intensive surveys of this disease were made in known areas of infection to learn the amount and kind of damage produced. Two areas having a particularly high incidence of the disease were found, near Chungo Creek and near Clearwater ranger station. All of the trees on two sample plots at Chungo Creek were infected, with up to 61 stem cankers per tree and an average of 24 cankers per tree. Ninety per cent of the trees at Clearwater ranger station were infected, with an average of 13 stem cankers per tree. Intensities of infection as great as observed at Chungo Creek and Clearwater usually lead to stem girdling, and eventually to either top killing or complete mortality.

Dwarf mistletoe of pine Arceuthobium americanum Nutt. ex
Engelm.

Eighteen new locality records for this disease were reported in 1960, and 54 previously known areas of infection on lodgepole pine were investigated to determine their extent and intensity of infection. These surveys showed 61 per cent of the areas were heavily infected, and 83 per cent of these were stands more than 80 years old. The estimated area of the 54 stands is 43 square miles. A number of areas were selected to enable growth-loss and mortality studies to get underway in 1961.

An experimental flight was made near Jumping Pound, to determine the effectiveness of aircraft in dwarf mistletoe surveys. In stands about 80 years old witches' brooms were visible from 300-500 feet above the ground. In stands more than 100 years old severe brooming was visible from 800 feet. Further flights are scheduled for 1961 to expand air survey techniques for this disease.

Rust diseases

Needle rust of white and black spruces caused by Chrysomyxa ledi and C. ledicola, was epidemic in the Rocky Mountain House and Clearwater areas, but was much less prevalent elsewhere in the Conservation area. The spruce cone rust, caused by Chrysomyxa pirolata was common at scattered points in the area, but was most abundant near Rocky Mountain House where about 10 per cent of the cones were affected. Stem rusts caused by Cronartium commandrae and C. stalachforme were noted at several points in the Kananaskis valley and tributaries, where mortality in lodgepole pine saplings was common.

Red stain of lodgepole pine Peniophora pseudopini Weres. & Gibson

A survey commenced in 1959 to determine the distribution and incidence of this disease of lodgepole pine heartwood was completed during the year. Large differences in the incidence and amount of stain were found between sites and in trees of different ages. In 100-year old stands about 90 per cent of the trees are infected in wet sites, and about 50 per cent in dry sites. This is equivalent to about five and one per cent volume loss in wet and dry sites respectively. The incidence of staining is less in both sites in trees either less than or more than 100 years.

Ink spot of aspen Sclerotium sp.

This disease was noted near Turner Valley and north to Bow River in 1960. It is characterized by the premature casting of affected leaves.

Winter injury

The red belt form of this disease was not observed in 1960, although extensive mortality of spruce and pine in the vicinity of Clearwater ranger station was observed in an area known to have been seriously damaged in 1959 and previous years.

- 41 -

GOVERNMENT OF THE PROVINCE OF ALBERTA
OFFICE OF THE PROVINCIAL AUDITOR

Drought

A late summer drought caused extensive foliage and branch mortality to most conifers in the mountains and foothills in 1960. Branch mortality was common on gravel outwash soils. Douglas fir and spruce were the most seriously affected.

* * * *

I have audited the books and records of the Eastern Rockies Forest Conservation Board maintained by the Department of Lands and Forestry, Government of the Province of Alberta, for the year ended March 31, 1961 and submit the following statements herewith:

Statement	Particulars
A.	Balance Sheet
B.	Statement of Maintenance Expenditure
C.	Statement of Government of Canada and Government of Province of Alberta Equity

Total capital expenditures from inception to March 31, 1965 amounting to \$6,278,502.13 were made from funds provided by the Government of Canada (as authorized under Section 8 (a) of the Memorandum of Agreement), for the location and construction of forest improvements, the making of a forest inventory, reforestation, and such other works and services as the Board considered necessary in that area of the East Slope of the Rocky Mountains forming part of the watershed of the Saskatchewan River, as more definitely described in the Appendix to the Act. The total expenditure was not to exceed \$6,300,000.00 during the seven years ended March 31, 1965.

I certify that, in my opinion, the attached Balance Sheet is properly drawn up so as to show the true financial position of the Eastern Rockies Forest Conservation Board as at March 31, 1961 according to the information and explanations given to me and as shown by the records of the Board and the accompanying statements correctly set forth the result of transactions for the year ended at that date.

C. X. [Signature]
Provincial Auditor.

GOVERNMENT OF THE PROVINCE OF ALBERTA
OFFICE OF THE PROVINCIAL AUDITOR

EDMONTON,

June 20, 1961

Eastern Rockies Forest Conservation Board
Calgary, Alberta

I have audited the books and records of the Eastern Rockies Forest Conservation Board maintained by the Department of Lands and Forests, Government of the Province of Alberta, for the year ended March 31, 1961 and submit the following statements herewith:

<u>Statement</u>	<u>Particulars</u>
A.	Balance Sheet
B.	Statement of Maintenance Expenditure
C.	Statement of Government of Canada and Government of Province of Alberta Equity

Total capital expenditures from inception to March 31, 1955 amounting to \$6,278,906.10 were made from funds provided by the Government of Canada (as authorized under Section 8 (a) of the Memorandum of Agreement), for the location and construction of forest improvements, the making of a forest inventory, reforestation, and such other works and services as the Board considered necessary in that area of the East Slope of the Rocky Mountains forming part of the watershed of the Saskatchewan River, as more definitely described in the Appendix to the Act. The total expenditure was not to exceed \$6,300,000.00 during the seven years ended March 31, 1955.

I certify that, in my opinion, the attached Balance Sheet is properly drawn up so as to show the true financial position of the Eastern Rockies Forest Conservation Board as at March 31, 1961 according to the information and explanations given to me and as shown by the records of the Board and the accompanying statements correctly set forth the result of transactions for the year ended at that date.

C. H. Shinkins F. C. A.
Provincial Auditor.

EASTERN ROCKIES FOREST CONSERVATION BOARD

BALANCE SHEET AS AT MARCH 31, 1961

ASSETS

Workmen's Compensation Board deposit	\$ 5,146.49
Value of loose tools and equipment transferred to the Province of Alberta as at April 1, 1959	173,496.38
Capital improvements and works	5,716,615.20
	<hr/>
	\$ 5,895,258.07
	<hr/>

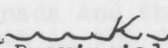
LIABILITIES

Government of Canada and Government of the Province of Alberta, equity as per Statement C	\$ 5,895,258.07
	<hr/>

Note: Section 20 of the Memorandum of Agreement set forth in the Schedules to Chapter 59, Statutes of Canada, 1947 and Chapter 20, Statutes of Alberta, 1948 and Amendment Acts, 1957 provides that upon termination of the Agreement:

- (a) All improvements or works resulting from the carrying out of the programs of the Board shall belong to the Province.
- (b) All other property acquired by the Board shall belong to the Province.

This is the Balance Sheet referred to in my report of June 20, 1961, addressed to the Eastern Rockies Forest Conservation Board.

C. X.  C. A.
Provincial Auditor.

EASTERN ROCKIES FOREST CONSERVATION BOARD

STATEMENT OF MAINTENANCE EXPENDITURE

FOR THE YEAR ENDED MARCH 31, 1961

Maintenance expenses:

Salaries	\$ 399,683.23	
Wages	85,914.01	
Motor vehicle expense	56,712.50	
Rentals	47,965.69	
New construction	27,642.84	
Repairs and replacements (other than motor vehicles)	27,466.95	
Travelling	20,952.37	
Material	19,232.07	
Heat, light and power	13,425.11	
Camp supplies	8,297.58	
Painting, stationery and office supplies	3,826.07	
Telegrams and telephones	1,349.25	
Wells	1,276.00	
Uniforms	1,139.31	
Freight, express and cartage	1,022.09	
Honorarium	1,000.00	
Postage	950.12	
Miscellaneous supplies and expenses	<u>582.05</u>	
		\$ 718,437.24

Movable equipment, loose tools and small equipment:

Tractors, trailers and heavy equipment	\$ 82,558.67	
Cars and trucks	41,184.84	
Office furniture and equipment	594.66	
Miscellaneous equipment	<u>23,145.36</u>	
		<u>147,483.53</u>
		\$ <u>865,920.77</u>

Provided by:

Appropriation 1906	\$ <u>865,920.77</u>
--------------------	----------------------

Note: The total amount expended by the Board was provided by the Government of the Province of Alberta in accordance with Section 2 (a) (ii) of the Memorandum of Agreement, dated June 17, 1953 between the Government of Canada and the Government of the Province of Alberta as set forth in the Schedules to Chapter 41, Statutes of Canada, 1952 and Chapter 36, Statutes of Alberta, 1953.

The remuneration and expenses of members of the Board were paid by the Governments of Canada and the Province of Alberta in accordance with Section 2 (b) (iii) of the Memorandum of Agreement and are not, with the exception of the honorarium of \$1,000.00 to A. T. Baker, included in the above statement.

EASTERN ROCKIES FOREST CONSERVATION BOARD
STATEMENT OF GOVERNMENT OF CANADA AND GOVERNMENT
OF PROVINCE OF ALBERTA EQUITY
FOR THE YEAR ENDED MARCH 31, 1961

Balance as at April 1, 1960	\$ 5,895,251.37
Add:	
Workmen's Compensation Board deposit interest	<u>146.49</u>
	\$ 5,895,397.86
Deduct:	
Workmen's Compensation Board interest remitted	<u>139.79</u>
Government of Canada and Government of Province of Alberta equity as at March 31, 1961	\$ 5,895,258.07

[illegible]

SD 414 C2 E116 1960/1961
EASTERN ROCKIES FOREST
CONSERVATION BOARD

ANNUAL REPORT OF THE EASTERN
SERIAL M1 39721763 SCI



000038197711

SD
414
C2E116
1960/61

2299456

SCIENCE
CAMERON LIBRARY

B2